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| 09/703,038 | 10/31/2000 | Tony M. Brewer | FDRY-0170-US | 8896 |
| 33707 7590 01/27/2009 FOUNDRY NETWORKS, INC. Legal Department 4980 GREAT AMERICA PARKWAY SANTA CLARA, CA 95054 | | | | |
| EXAMINER | | | | |
| SAM, PHIRIN | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/703,038

Applicant(s)

BREWER ET AL.

Examiner

PHIRIN SAM

Art Unit

2419

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 63-65, 68-75, 77-84, 86-88, 90, 92, 94, 95, 101-109 and 112-127 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 63-65, 78, 79, 82, 86-88, 90, 92, 101, 102, 106, 108, 109, 112-115, 119-122 and 124-127 is/are rejected.
- 7) ☒ Claim(s) 68-75, 77, 80, 81, 83, 84, 94, 95, 103-105, 107, 116-118 and 123 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/12/06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-802)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 63-65, 78, 79, 82, 86-88, 90, 92, 101, 102, 106, 108, 109, 112-115, 119-122, and 124-127 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,701,088 to Watanabe et al. (hereinafter "Watanabe") in view of US Patent 7,139,247 to Desai et al. (hereinafter "Desai").

Regarding amended claim 63, Watanabe discloses a method of passing received Internet Protocol (IP) data packets through a network device, said method comprising:

(a) constructing, within said network device, a chunk as a substantially fixed quantity of data with a payload that is sized to fit more than one of said IP data packets (see Figs. 4 and 9, col. 6, lines 17-28);

- (b) filling said payload of said chunk with a portion of at least one said IP data packet (see Figs. 4 and 9, col. 6, lines 17-28);
- (c) passing said chunk through an optical switch fabric of said network device (see Figs. 4 and 9, element 14, col. 6, lines 3-42).

Watanabe does not disclose a framing symbol in each said chunk. However, Desai discloses a framing symbol in each said chunk (see Fig. 11, col. 11, lines 28-37). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine a framing symbol in each said chunk teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in the claim 63.

Regarding claim 65, Watanabe discloses said passing comprises using said framing symbol to determine uniquely within a stream of bits the beginning and the trailing end of said chunk (see Fig. 4, col. 6, lines 28-42).

Regarding claim 78, Watanabe discloses formatting said chunk to include adding a chunk header (see Fig. 6).

Regarding claims 79, 102, and 122, Watanabe does not disclose said chunk header includes identification of chunk type. However, Desai discloses said chunk header includes identification of chunk type (see Fig. 24, col. 21, lines 14-23). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine said chunk header includes identification of chunk type teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read

column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in the claim 79.

Regarding claim 82, Watanabe does not disclose the chunk header includes a sequence number. However, Desai discloses the chunk header includes a sequence number (see Fig. 39, col. 42, lines 34-45). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the chunk header includes a sequence number teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in claim 82.

Regarding claim 86, Watanabe discloses said chunk contains multiple data packets (see Figs. 4 and 9, col. 6, lines 17-28).

Regarding claim 87, Watanabe does not disclose said sized chunk contains a segment of a data packet, said data packet having a length greater than the size of said chunk. However, Desai discloses said sized chunk contains a segment of a data packet, said data packet having a length greater than the size of said chunk (see Fig. 32, col. 34, lines 35-52). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine said sized chunk contains a segment of a data packet, said data packet having a length greater than the size of said chunk teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in the claim 87.

Regarding amended claim 88, Watanabe discloses an Internet Protocol (IP) packet router (see Fig. 4), said system router comprising:

- (a) at least one chunk having a payload comprising a plurality of IP data packets and a framing symbol (see Figs. 4 and 9, col. 6, lines 17-28);
- (b) an optical switch fabric through which said chunk passes (see Figs. 4 and 9, element 14, col. 6, lines 3-42);

Watanabe does not disclose framing symbol. However, Desai discloses framing symbol (see Fig. 11, col. 11, lines 28-37). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Framing symbol teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in the claim 88.

Regarding claim 64 and amended claim 90, Watanabe does not disclose the framing symbol is located adjacent the trailing end of each said chunk. However, Desai discloses the framing symbol is located adjacent the trailing end of each said chunk (see Fig. 11, col. 11, lines 29-37). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the framing symbol is located adjacent the trailing end of each said chunk teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in claim 90.

Regarding amended claim 92 and claim 121, Watanabe does not disclose each said chunk is formatted to include a chunk cyclical redundancy check (CRC) field. However, Desai discloses each said chunk is formatted to include a chunk cyclical redundancy check (CRC) field (see Fig. 12b, element 625d). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine each said chunk is formatted to include a chunk cyclical redundancy check (CRC) field teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in the claim 92.

Regarding amended claim 101, Watanabe does not disclose each said chunk is formatted to include a chunk header. However, Desai discloses each said chunk is formatted to include a chunk header (see Fig. 11, col. 11, lines 29-37). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine each said chunk is formatted to include a chunk header teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in the claim 101.

Regarding amended claim 106, and claims 119, 120, Watanabe discloses said chunk header includes identification of an input of said optical switch fabric and an output of said optical switch fabric for said chunk (see Figs. 4 and 6, col. 5, lines 54-61)

Regarding claim 108, Watanabe discloses an Internet Protocol (IP) packet router system, said system comprising:

- (a) at least one chunk having a payload comprising a plurality of data packets and a framing symbol (see Figs. 4 and 9, col. 6, lines 17-28);
- (b) an IP packet router, including an optical switch fabric through which said chunk passes (see Figs. 4 and 9, element 14, col. 6, lines 3-42).
- (c) a first electrical switch stage at an input side of said optical switch fabric and a second electrical switch stage at an output side of said switch fabric (see Figs. 4-5b and 7a-7b, elements 17-1 to 17-3, and 18-1 to 18-3, col. 5, lines 40-53);
- (d) wherein each said chunk is formatted to include a chunk header (see Fig. 6);

Watanabe does not disclose said chunk header includes a sequence number. However, Desai discloses chunk header includes a sequence number (see Fig. 39, col. 42, lines 34-45). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine said chunk header includes a sequence number. However, Desai discloses chunk header includes a sequence number teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in the claim 108.

Regarding claim 109, Watanabe discloses the payload of said at least one chunk further comprises at least one packet segment and an associated packet header (see Figs. 4 and 6, col. 5, lines 54-61).

Regarding amended claim 112, and claims 114, 115, Watanabe discloses a method of information flow through an IP packet network device, said method comprising:

- (a) encapsulating, within said network device, input IP data packets from a plurality of source ports into substantially fixed sized chunks (see Figs. 4 and 9, col. 6, lines 17-28);
- (b) formatting overhead information onto each of said chunks (see Figs. 5a and 5b, col. 6, lines 43-58);
- (c) sending said chunks to optical switch plane of said IP network device (see Fig. 4, col. 6, lines 17-42);

Watanabe does not disclose the overhead including a framing symbol. However, Desai discloses overhead including a framing symbol (see Fig. 11, col. 11, lines 29-37). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the overhead including a framing symbol teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in the claims 112, 114, and 115.

Regarding amended claim 113, Watanabe discloses the method further comprising:

- (a) converting said directed chunks into electrical signals (see Fig. 4, col. 4, lines 16-23);
- (b) sending said chunks from said optical switch plane (see Fig. 4, col. 4, lines 34-51);
- (c) performing error detection and error correction on said chunk (see Fig. 4, col. 6, lines 12-16, 28-33);
- (d) removing said overhead information from said chunks (see Fig. 4, col. 6, lines 33-42);
- (e) reassembling said input data packets out of said chunks (see Fig. 4, col. 8, lines 1-23).

Regarding claim 124, Watanabe discloses said optical switch plane is part of an optical switch fabric (see Fig. 4, col. 4, lines 34-51).

Regarding claim 125, Watanabe discloses said electrically switching determine uniquely within a stream of bits a beginning and a trailing end of each said chunk (see Fig. 4, col. 6, lines 28-42). Watanabe does not disclose the framing symbol. However, Desai discloses the framing symbol (see Fig. 11, col. 11, lines 29-37). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the framing symbol teaching by Desai with Watanabe. The motivation for doing so would have been to provide reliable, secure, symmetric, bi-directional broadband access read column 3, lines 36-37. Therefore, it would have been obvious to combine Desai and Watanabe to obtain the invention as specified in claim 125.

Regarding claim 126, Watanabe discloses stripping said IP data packets from said chunk within said network device (see Fig. 4, col. 6, lines 28-42).

Regarding claim 127, Watanabe discloses the IP packet router further comprising a first stage at an input side of said optical switch fabric and a second stage at an output side of said switch fabric, wherein said first stage is operable to construct said chunk, and said second stage is operable to strip said data packets from said chunk (see Fig. 4, col. 5, lines 40-53 and col. 6, lines 6-42).

Allowable Subject Matter

4. Claims 68-75, 77, 80, 81, 83, 84, 94, 95, 103-105, 107, and 123 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments with respect to claims above have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHIRIN SAM whose telephone number is (571)272-3082. The examiner can normally be reached on Increased Flexitime Policy (IFP) Program.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272 - 2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: January 23, 2009

By: /Phirin Sam/
Phirin Sam
Primary Examiner
Art Unit 2419